

Date: Wednesday, 14/11/2007 12:52:50 PM
 User: Linda Lacelle

Process Sheet

Customer : CC-DAR01 Dart Aerospace Ltd. Drawing Name : D412-664-203
 Job Number : 35720
 Estimate Number : 10804
 P.O. Number : N/A Part Number : D412664203
 This Issue : 14/11/2007 S.O. No. : N/A Drawing Number : RTN 652
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : LANDING GEAR Drawing Revision : N/A
 Previous Run : 00015 Material : N/A
 Written By : Due Date : 30/11/2007 Qty: 1 Um: Each
 Checked & Approved By :
 Comment :

Additional Product

DART		TEL: 1-813-632-4336 FAX: 1-813-632-4123	
TRANSPORT CANADA APPROVAL 00000			
P/N	D412-664-203	CHG	CHG006
DESC	Crosstube Aft High	STC	SH01-9
LOT	L30424	STC	SR01298NY
MONT	Bell 412	STC	
MADE IN CANADA			

Job Number:



Seq. #:	Machine Or Operation:	Description:
1.0	QC5	INSPECT WORK TO CURRENT STEP

Comment:

INSPECT
 RETURN FROM EDWARDS RTN 652

2.0	D412664203	Crosstube Aft High
-----	------------	--------------------

Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)
 Crosstube Aft High
 ORIGINAL B/N 30424

3.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
-----	-----------------	----------------------------

Comment: HAND FINISHING RESOURCE #1
 DIASEMBLE AND STRIP TUBE
 DISCARD ALL HARDWARE

RE-ALODINE

4.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
-----	-----	---

Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

5.0	SPRAY PAINTING	SPRAY PAINTING
-----	----------------	----------------

Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: D412-664-203

Job Number: 35720

Part Number: D412664203

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

Wrap in plastic bag to protect from scratches

RT 07-12-07

7.0

D3595

Rubber Cushion (per sq ft)



Comment: Qty.: 0.0492 sf(s)/Unit Total : 0.0492 sf(s)

Rubber Cushion (per sq ft)

.630" x5.70" x2pcs

Batch: 33835

RT 07-12-07

8.0

D2856600

Abrasion Strip



Comment: Qty.: 1.7640 f(s)/Unit Total : 1.7640 f(s)

Pick:

Qty Part number Description Batch

2 D2856-600(Cut to 10.090") Abrasion Strip 25656

RT 07-12-07

9.0

D28961

Support



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D2896-1 Support 30200

RT 07-12-07

10.0

D31891

Chafing Shield



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D3189-1 Chafing Shield 19465

RT 07-12-07

11.0

MS2192028

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-28 Clamp 104423

RT 07-12-07

W/O:		WORK ORDER CHANGES					
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Drawing Name: D412-664-203

Job Number: 35720

Part Number: D412664203

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

MS2192030

clamp(per MIL-DTL-8783C)



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

clamp(per MIL-DTL-8783C)

Batch: 100154/11729 (1)

RT 07-12-07

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

Assemble as per Dwg D412-664-203

1-Install supports with magnobond as per QSI 015 Adhere for for 12 Hrs

A/R 6398 Magnobond

Batch: 105379

Expiry Date: 08-05-01

RT 07-12-07

2-Install clamps as per Dwg D212-664-141. Torque clamps to 80-100 in lb.

M 07 12 09 (1)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 02/12/01 (40)

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

16.0

AN640A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch: M101124

SP

17.0

AN641A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

Batch: M101427

7/12/31 SP (12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 08/01/03
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Job Number: 35720

Part Number: D412664203

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

AN960JD616

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Washer

Batch: 1105906

50

19.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Batch: 1104374

7/12/31

50 (12)

20.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

08/01/02

21.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-664-203

*****Ensure tube is not packaged if curing time is less than 12 hrs, see step 27 for application time & date

Time & date of packaging: 08/01/02 @ 11:15am

Location: G

PPP Rev: G

8/1/07

50 (12)

22.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/01/03

Job Completion



U 58-01-03

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 90	APPROVED [Signature]	DRAWING NO. D412-664-243	REV. D SHEET 1 OF 3
DATE 07.03.09		TITLE CROSSTUBE ASSEMBLY (412 HI AFT) NTS	
A	01.10.17	NEW ISSUE	
B	05.02.04	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	
C	06.10.27	REMOVE D2856-600-1087, ADD D2732-058 & MAGNOBOND 6398 MS21920-32 WAS MS21920-30	
D	07.03.09	REMOVE D2732-058, CHANGE TO D3595-063-570	

RELEASE07.04.24 **[Signature]**

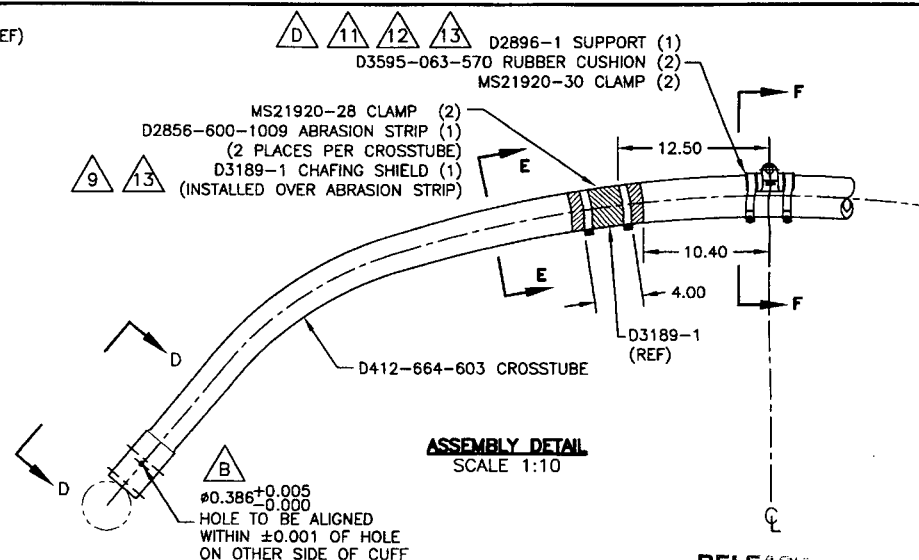
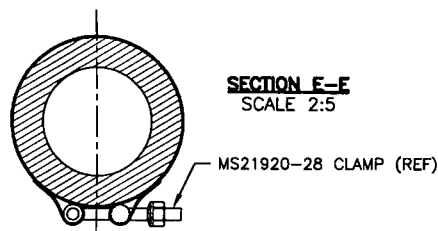
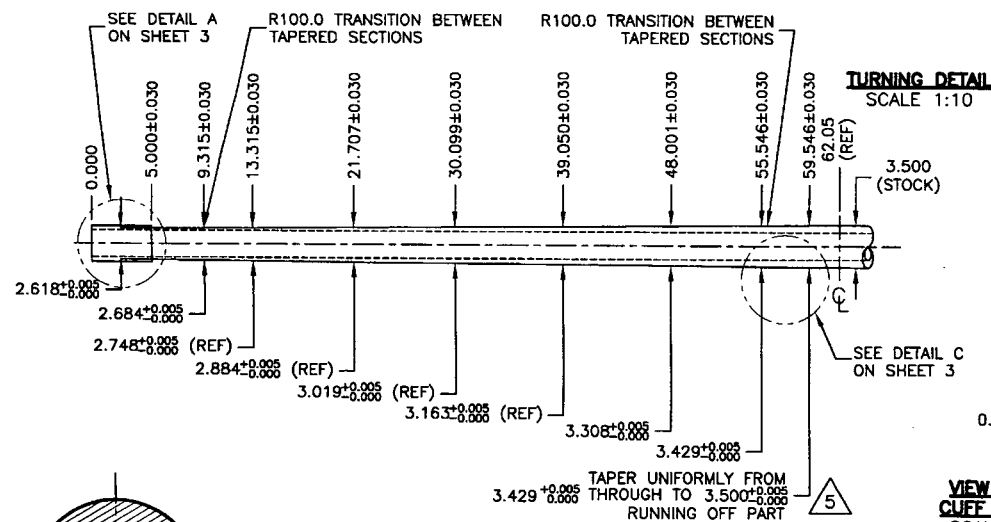
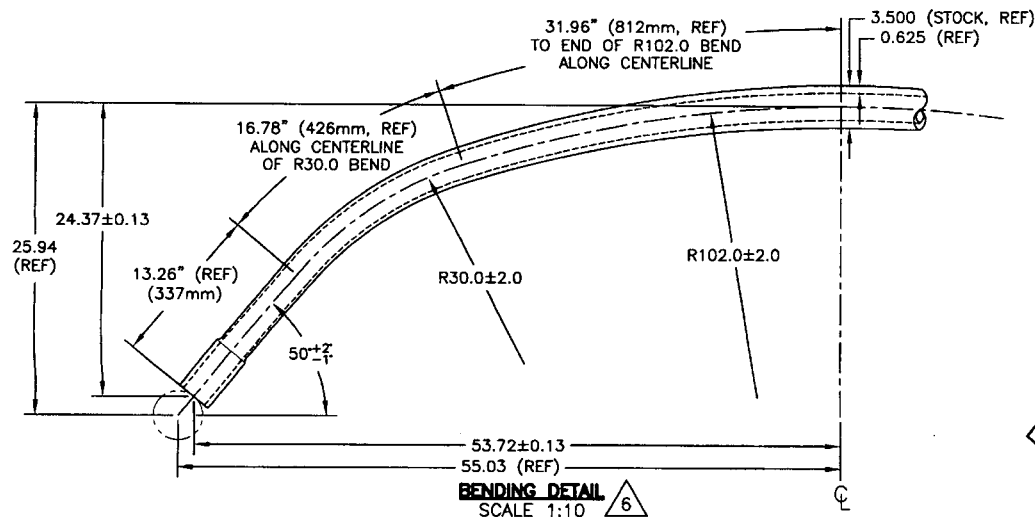
Qty	Part Number	Description
X	D412-664-243	CROSSTUBE ASSEMBLY (412 HIGH AFT)
1	D6009-129	CROSSTUBE
2	D3595-063-570	RUBBER CUSHION
1	D2896-1	SUPPORT
2	D2856-600-1009	ABRASION STRIP
4	MS21920-28	CLAMP
2	MS21920-30	CLAMP (OR MS21920-32)
2	D3189-1	CHAFING SHIELD
A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

wlo
35720**GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) MATERIAL: MANUFACTURED FROM D6009-129
FINISHED LENGTH = 124.09±0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE.
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2856-600-1009 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE PER QSI 035.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) APPLY A 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2896-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 12) INSTALL MS21920-30 CLAMPS (OR -32) WITH D3595-063-570 RUBBER CUSHIONS TO SECURE D2896-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE CROSSTUBE SUPPORT.
- 13) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

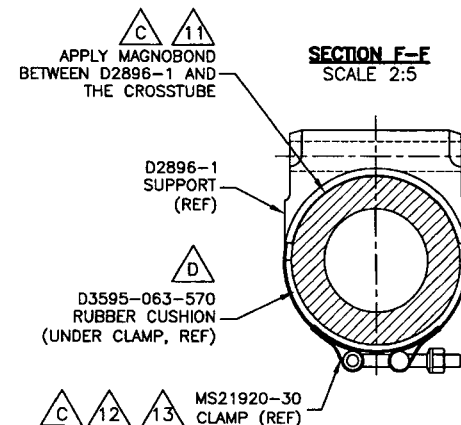
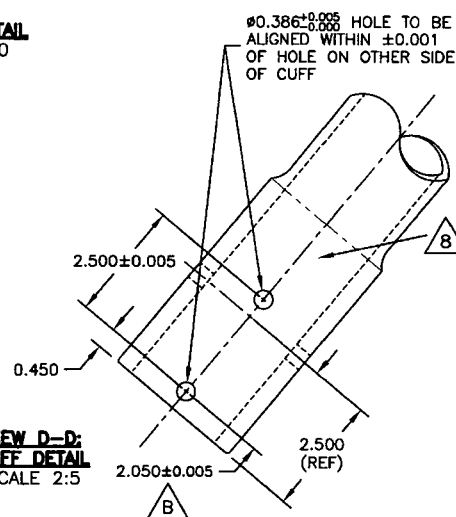
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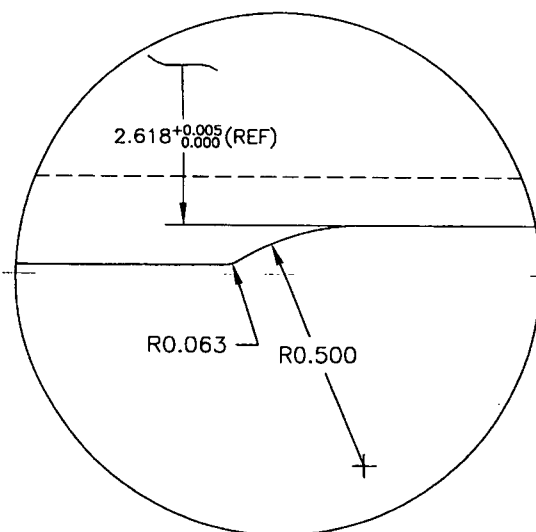
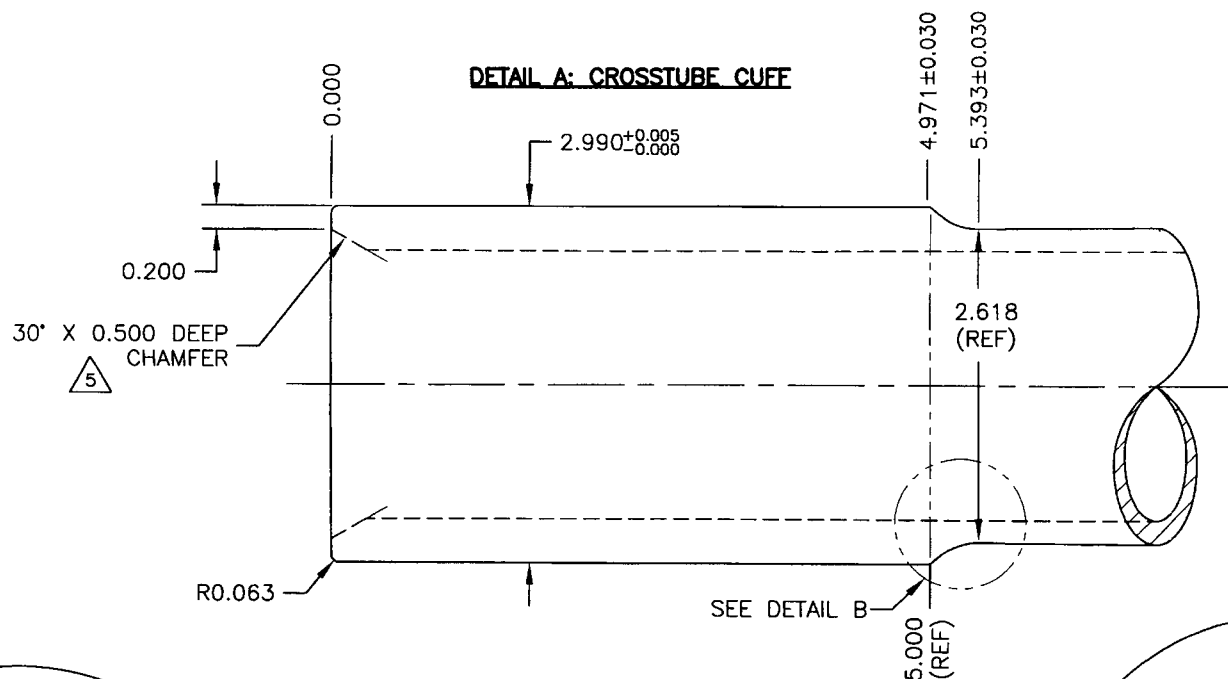
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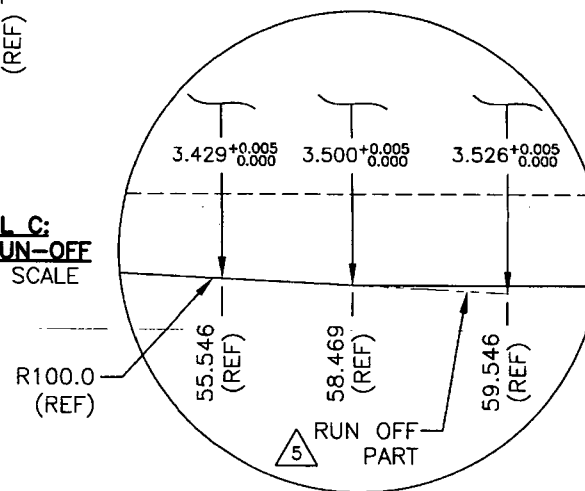
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CHECKED	PH	APPROVED	PH	DRAWING NO.	REV. D
	97			D412-664-243	SHEET 2 OF 3
DATE	07.03.09	TITLE		CROSSTUBE ASSEMBLY (412 HI AFT)	SCALE 1:10

RELEASED
 07.04.244P
 PER ECN 889



**DETAIL B: CUFF
 TRANSITION**
 SCALE 4:1

**DETAIL C:
 TAPER RUN-OFF**
 NOT TO SCALE



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DART

DART AEROSPACE LTD.
 HAWKESBURY, ONTARIO, CANADA

DATE

07.03.09

TITLE

CROSSTUBE ASSEMBLY (412 HI AFT)

SCALE

1:1

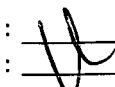
DRAWING NO.
 D412-664-243

REV. D

SHEET 3 OF 3

Date: Thursday, 10/01/2008 9:07:57 AM
 User: Linda Lacelle

Process Sheet

Customer :	CC-DAR01 Dart Aerospace Ltd.	Drawing Name :	D212-664
Job Number :	36700		
Estimate Number :	10804		
P.O. Number :		Part Number :	Z_CUSTOM
This Issue :	10/01/2008	Drawing Number :	ECN 1103
Prsht Rev. :	NC	Project Number :	
First Issue :	/ /	Drawing Revision :	
Previous Run :	00015	Material :	
Written By :		Due Date :	17/01/2008
Checked & Approved By :		Qty:	1
Comment :		Um:	Each

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

PULL FROM STK:

(12) -4 D212-664-101

-4 D212-664-201

✓ D412-664-203

35892 - 35891 - 35539
 35929 - 35928 - 35890 - 35893 - 35927 - 35541 -
 32681 - 32684 - 32680 - 34586 - 32151
 35720 - 35056 - 35106

ADD NEW PAPERWORK TO KITS IN STK

FAA STC: SR01298NY, PER ECN 1103

RETURN TO STOCK

17x 8/1/11 SCP

2.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



11 08.06.11